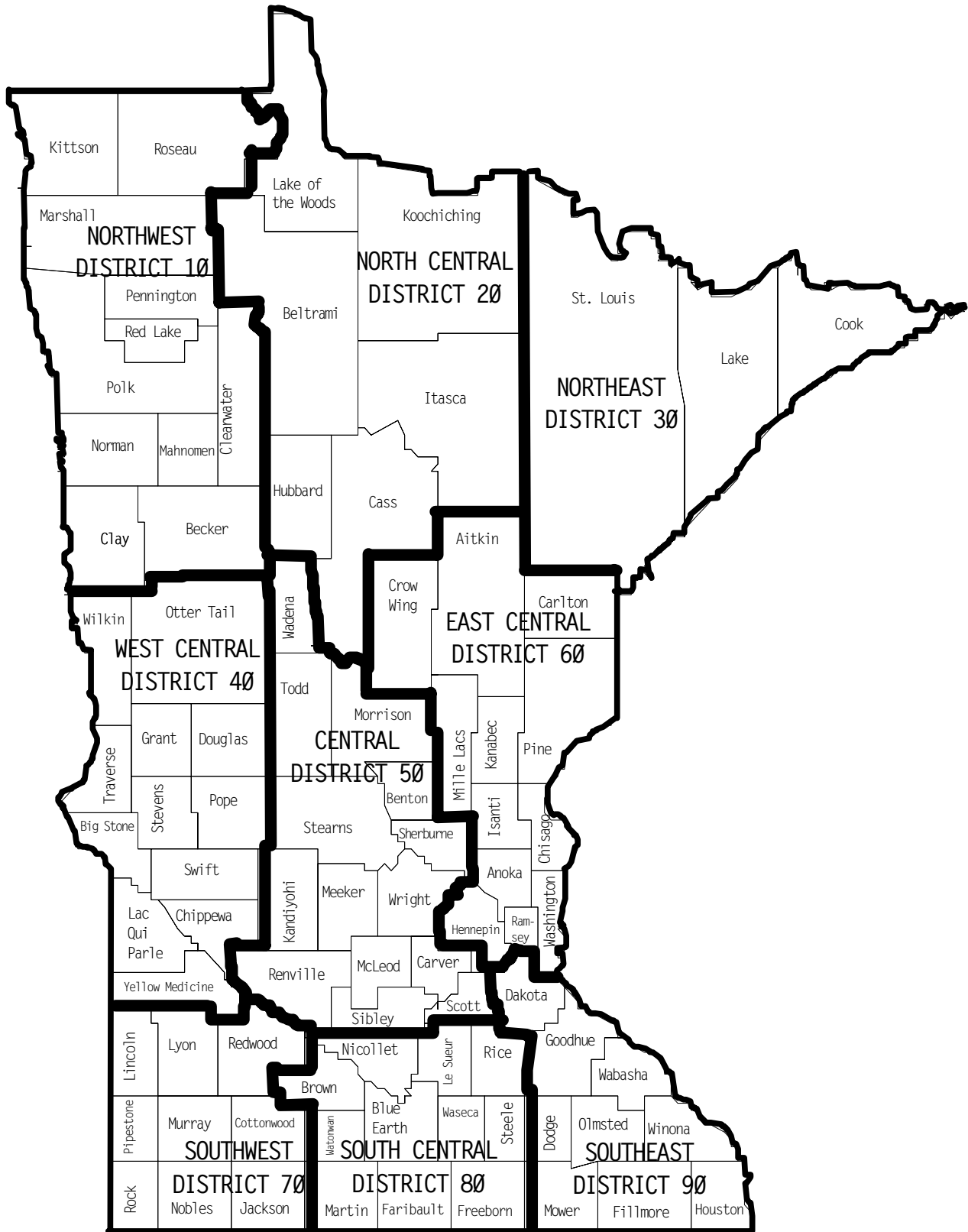


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Minnesota Agricultural Statistics 2003

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Gene Hugoson, Commissioner

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Foreword

Over the years, one of the messages I've often shared with Minnesota farmers is that to maximize profitability, they need to constantly be looking for new ways to do things more efficiently and effectively. It's not enough to continue running a business the same way it's been run for decades. Times change, markets change, and in order to stay relevant, farmers need to keep pace.

Running a farming business effectively requires having current and accurate information in order to make sound production and marketing decisions. Publications such as this *Minnesota Agricultural Statistics* book and the *Census of Agriculture* help give all of us better insight into agricultural trends. Estimates of crop and livestock production, farm income and expenses, farm numbers and land in farms, and many others, help the entire agricultural community plan for the future of Minnesota agriculture.

I want to express my gratitude to all the farmers and agribusinesses that made this book possible by responding to surveys conducted by the Minnesota Agricultural Statistics Service.

*Gene Hugoson, Commissioner
Minnesota Department of Agriculture*



Although Minnesota is a major producer of corn, soybeans, and spring wheat, farmers in the State also produce a wide variety of other crops. This year we are featuring on our cover many of the speciality crops grown in Minnesota. These crops are grown throughout the State, but especially in the Red River Valley of Northwestern Minnesota.

We hope this publication will help tell the story of trends in Minnesota agriculture. If you need more information in a particular area, please let us know. Your ideas will help us improve this important service. E-mail us at nass-mn@nass.usda.gov or call us at **1-800-453-7502**. Also, visit our web site at www.nass.usda.gov/mn/.

*Michael Hunst, State Agricultural Statistician
Minnesota Agricultural Statistics Service*

STATE RANKINGS: Minnesota's Rank Among States 1/

Item	1	2	3	4	5	6	7	8	9	10
Cash Receipts, 2001										
Total	CA	TX	IA	NE	KS	MN	NC	IL	FL	WI
Livestock & Livestock Products	TX	CA	NE	IA	KS	NC	WI	MN	GA	AR
Crops	CA	IL	IA	FL	TX	MN	WA	NE	IN	NC
Crop Production, 2002										
Corn	IA	IL	MN	NE	IN	WI	SD	KS	MO	OH
Soybeans	IA	IL	MN	IN	NE	MO	OH	SD	AR	ND
All Wheat	KS	ND	WA	MT	OK	ID	TX	MN	OH	NE
Spring Wheat	ND	MT	MN	ID	WA	SD	OR	CO	UT	WI
Oats	MN	WI	IA	ND	TX	PA	SD	MI	OH	NY
Barley	ND	ID	MT	WA	CO	MN	CA	WY	PA	AZ
All Sunflowers	ND	SD	KS	MN	CO	TX	NE			
Dry Edible Beans	ND	MI	NE	MN	ID	CA	CO	WA	WY	MT
All Hay	TX	CA	MO	KS	MN	NE	IA	ID	KY	WI
All Potatoes	ID	WA	WI	CO	OR	ND	MN	CA	ME	MI
Sugarbeets	MN	ID	ND	MI	CA	MT	CO	NE	WY	OR
Flaxseed	ND	MT	MN	SD						
Canola	ND	MN								
Sweet Corn for Processing	WA	MN	WI	OR	IL					
Green Peas for Processing	MN	WA	WI	OR	NY					
Cultivated Wild Rice 2/	CA	MN								
Livestock, Dairy, Poultry										
Red Meat Production, 2002	NE	IA	KS	TX	IL	MN	CO	NC	IN	WI
Cattle/Calves, January 1, 2003 3/	TX	KS	NE	OK	CA	MO	SD	IA	WI	CO
Milk Cows, January 1, 2003	CA	WI	NY	PA	MN	ID	TX	NM	MI	OH
Cattle/Calves Marketed, 2002 4/	TX	KS	NE	CO	OK	CA	SD	IA	MO	MT
Cattle/Calves on Feed, Jan 1, 2003 3/	TX	NE	KS	CO	IA	CA	SD	OK	ID	AZ
Hogs & Pigs, December 1, 2002 5/	IA	NC	MN	IL	IN	MO	NE	OK	KS	OH
Pig Crop, 2002	NC	IA	MN	IL	MO	NE	OK	IN	KS	OH
Hogs Marketed, 2002	IA	NC	MN	IL	MO	NE	OK	IN	SD	OH
All Sheep & Lambs, Jan 1, 2003 6/	TX	CA	WY	SD	CO	UT	MT	ID	IA	OR
Lamb Crop, 2002 3/	TX	WY	SD	MT	CA	UT	ID	IA	CO	OR
All Chickens, December 1, 2002 3/	IA	OH	GA	PA	IN	CA	TX	AR	NC	AL
Eggs Produced, Dec 2001-Nov 2002	IA	OH	PA	CA	IN	GA	TX	AR	MN	NE
Turkeys Raised, 2002 7/	NC	MN	AR	MO	VA	CA	IN	PA	SC	IA
Milk Production, 2002	CA	WI	NY	PA	MN	ID	NM	MI	WA	TX
Dairy Products Manufactured, 2002										
Total Cheese	WI	CA	NY	ID	MN	PA	IA	OH	SD	WA
American Cheese	WI	CA	MN	ID	WA	IA	OR	NY	SD	OH
Ice Cream	CA	IN	PA	TX	MN	OH	NY	NC	MI	FL
Mink Pelts Produced, 2001	WI	UT	MN	OR	ID	WA	IA	SD	PA	OH
Honey Produced, 2002	ND	CA	FL	SD	MN	MT	TX	WI	NY	ID
Agricultural Exports, Fiscal Year 2001	CA	TX	IA	KS	IL	NE	MN	WA	IN	NC

1/ Rankings based on published data.

2/ Source: Minnesota Cultivated Wild Rice Council.

3/ Minnesota ranks 11th.4/ Minnesota ranks 15th.5/ MO and NE tied for 6th place.6/ Minnesota ranks 13th.7/ PA and SC tied for 8th place.

COUNTY RANKINGS: Minnesota's Leading Agricultural Counties

Item	1	2	3	4	5	6	7	8	9	10
2001 Cash 1/ Farm Receipts										
Total	Stearns	Renville	Martin	Polk	Blue Earth	Kandiyohi	Otter Tail	Redwood	Brown	Nicollet
Crops	Polk	Renville	Clay	Redwood	Wilkin	Yellow Medicine	Chippewa	Faribault	Freeborn	Norman
Livestock	Stearns	Martin	Blue Earth	Kandiyohi	Morrison	Nicollet	Otter Tail	Brown	Renville	Winona
Government Payments	Polk	Renville	Marshall	Redwood	Martin	Clay	Mower	Freeborn	Faribault	Yellow Medicine
2002 Crop Production										
Corn for Grain	Renville	Martin	Redwood	Faribault	Mower	Freeborn	Blue Earth	Jackson	Lyon	Yellow Medicine
Soybeans	Renville	Redwood	Martin	Mower	Faribault	Blue Earth	Nobles	Freeborn	Jackson	Yellow Medicine
All Wheat	Polk	Marshall	Clay	Wilkin	Kittson	Norman	Otter Tail	Traverse	Becker	Grant
Oats	Stearns	Otter Tail	Fillmore	Wabasha	Winona	Todd	Olmsted	Roseau	Houston	Goodhue
Barley	Marshall	Polk	Pennington	Roseau	Kittson	Norman	Wilkin	Stearns	Clay	Otter Tail
Sunflowers	Marshall	Norman	Clay	Polk	Roseau	Kittson	Wilkin	Otter Tail	Pennington	Red Lake
Sugarbeets	Polk	Wilkin	Clay	Renville	Marshall	Kittson	Chippewa	Norman	Kandiyohi	Grant
Canola	Roseau	Marshall	Kittson	Lake of the Woods	Pennington	Clay	Red Lake			
Flaxseed	Marshall	Roseau								
Dry Edible Beans	Polk	Otter Tail	Hubbard	Renville	Marshall	Kandiyohi	Swift	Norman	Morrison	Clay
All Hay	Stearns	Otter Tail	Winona	Fillmore	Morrison	Goodhue	Houston	Wabasha	Todd	Olmsted
Potatoes 2/	Sherburne	Morrison	Polk	Todd	Benton	Freeborn	Clay	Marshall	Kittson	Red Lake
Green Peas	Renville	Mower	Dakota	Olmsted	Brown	Steele	Faribault	Sibley	Redwood	Waseca
Sweet Corn 3/	Renville	Freeborn	Mower	Sibley	Brown	Olmsted	Waseca	Faribault	Steele	Redwood
Livestock, Dairy & Poultry										
Cattle & Calves, Jan 1, 2003 4/	Stearns	Otter Tail	Fillmore	Winona	Morrison	Goodhue	Todd	Wabasha	Houston	Olmsted
Beef Cows, Jan 1, 2003 5/	Fillmore	Otter Tail	Morrison	Cass	Clearwater	Todd	Beltrami	Houston	Olmsted	Stearns
Milk Cows, Jan 1, 2003 6/	Stearns	Winona	Morrison	Otter Tail	Goodhue	Todd	Wabasha	Fillmore	Benton	Carver
Milk Prod., 2002	Stearns	Winona	Otter Tail	Morrison	Goodhue	Wabasha	Todd	Fillmore	Carver	Wright
Breeding Sheep & Lambs, Jan 1, 2003 7/	Pipestone	Lincoln	Murray	Otter Tail	Goodhue	Cottonwood	Fillmore	Todd	Jackson	Renville
Hogs, Dec 1, 2002	Martin	Blue Earth	Brown	Nicollet	Renville	Nobles	Rice	Freeborn	Jackson	Pipestone
Pig Crop, 2002	Martin	Blue Earth	Nicollet	Renville	Brown	Pipestone	Faribault	Rice	Jackson	Freeborn
Cattle & Calves on Feed, Jan 1, 2003	Lyon	Nobles	Rock	Redwood	Stearns	Cottonwood	Renville	Murray	Stevens	Dakota

1/ Numbers for 2002 not available at time of publication.

2/ Includes published counties only.

3/ Faribault and Steele tied for 8th

4/ Fillmore and Winona tied for 3rd

5/ Beltrami and Houston tied for 7th

6/ Benton and Carver tied for 9th

7/ Cottonwood, Fillmore and Todd tied for 6th

FARM NUMBERS

The 2002 total number of farms in Minnesota was estimated at 79,000, unchanged from 2001. The Minnesota number of farms in the \$1,000-\$9,999 economic sales class increased 500 to 31,000 in 2001. Those with sales in the \$10,000-\$99,999 economic sales class decreased 500 to 28,000 farms in 2002.

Minnesota commercial farms in the \$100,000 and over sales class remained unchanged from 2001 at 20,000 in 2002. Beginning in 2002, this \$100,000 and over sales class was divided into three categories for number of farms and land in farms.

A farm is defined as any establishment from which \$1,000 or more of agricultural products were sold or would normally be sold during the year. Government payments are included as sales.

**NUMBER OF FARMS, LAND IN FARMS, AND
AVERAGE SIZE: Minnesota, 1991-2002 1/ 2/**

Year	Number of Farms	Land in Farms	Avg. Size of Farms
	Number	1,000 Acres	Acres
1991	88,000	30,000	341
1992	88,000	29,800	339
1993	86,000	29,700	345
1994	84,500	29,500	349
1995	83,000	29,400	354
1996	82,000	29,200	356
1997	81,000	29,100	359
1998	80,000	28,900	361
1999	80,000	28,800	360
2000	79,000	28,600	362
2001	79,000	28,500	361
2002	79,000	28,400	359

1/ A farm is any establishment from which \$1,000 or more of agricultural products were sold or would normally be sold during the year.

2/ For the years of 1992 and earlier, farm numbers and land in farms are for a June 1 reference date. Starting with 1993, numbers are for the entire year.

**NUMBER OF FARMS: By Economic Sales Class
Minnesota, 1997-2002**

Year	\$1,000- \$9,999	\$10,000- \$99,999	\$100,000 & Over	\$100,000- \$249,999	\$250,000- \$499,999	\$500,000 & Over	Total
	Number						
1997	29,500	30,500	21,000	--	--	--	81,000
1998	29,500	29,500	21,000	--	--	--	80,000
1999	30,500	29,500	20,000	--	--	--	80,000
2000	30,000	29,000	20,000	--	--	--	79,000
2001	30,500	28,500	20,000	--	--	--	79,000
2002 1/	31,000	28,000	--	12,500	5,000	2,500	79,000

1/ Beginning in 2002, the \$100,000 & Over sales class was divided into three categories.

**LAND IN FARMS: By Economic Sales Class
Minnesota, 1997-2002**

Year	\$1,000- \$9,999	\$10,000- \$99,999	\$100,000 & Over	\$100,000- \$249,999	\$250,000- \$499,999	\$500,000 & Over	Total
	1,000 Acres						
1997	3,100	8,700	17,300	--	--	--	29,100
1998	3,100	8,500	17,300	--	--	--	28,900
1999	3,100	8,600	17,100	--	--	--	28,800
2000	3,000	8,500	17,100	--	--	--	28,600
2001	3,000	8,400	17,100	--	--	--	28,500
2002 1/	3,000	8,300	--	7,600	5,300	4,200	28,400

1/ Beginning in 2002, the \$100,000 & Over sales class was divided into three categories.

EXPORTS

Minnesota ranked 7th in farm exports for fiscal year 2001. The value of the state's exports came to \$2.30 billion versus \$2.23 billion in 2000.

The table below shows the value of farm exports by commodity group. These figures are not actual exports but are derived from Minnesota's contribution to U.S. production and/or sales. They reflect Minnesota's important stake in the national export market.

AGRICULTURAL EXPORTS: Minnesota, FY 2001

Commodity	Value
	<u>Million Dollars</u>
Feed Grains & Products	552.0
Soybeans & Products	724.8
Wheat & Products	175.5
Live Animals & Meat 1/	210.6
Vegetables & Preparations	176.6
Feeds & Fodders	113.9
Dairy Products	89.4
Hides & Skins	53.1
Poultry & Products	62.9
Sunflower Seed & Oil	7.9
Fats, Oils, Greases	8.9
Seeds	23.5
Other 2/	100.3
Total	2,299.4

AGRICULTURAL EXPORTS: State Rankings, FY 2001

Rank	State	Value
		<u>Million Dollars</u>
First	CA	8,698.4
Second	TX	3,332.9
Third	IA	3,259.1
Fourth	KS	3,099.3
Fifth	IL	3,056.5
Sixth	NE	2,914.6
Seventh	MN	2,299.4
Eighth	WA	1,937.5
Ninth	IN	1,546.0
Tenth	NC	1,389.0

1/ Excludes Poultry.

2/ Includes confectionary, nursery and greenhouse, essential oils, beverages (excluding juice), and other miscellaneous animal and vegetable products.

Note: Totals may not add due to rounding.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C. and USDA, NASS website (www.usda.gov/nass).

LAND VALUES: Average Per Acre Value of Farmland and Buildings, Minnesota and Selected States, January 1, 1999-2002 1/ 2/

State	1999	2000	2001	2002	Change 2001-2002
	<u>Dollars Per Acre</u>				<u>Percent</u>
MN	1,230	1,280	1,360	1,450	6.6
IA	1,770	1,820	1,900	1,980	4.2
ND	406	415	425	440	3.5
SD	360	380	405	440	8.6
WI	1,370	1,700	2,000	2,200	10.0
48 States 3/	1,020	1,080	1,150	1,210	5.2

1/ Value of farmland and buildings in current dollars (not adjusted for inflation).

2/ Publication date is scheduled for August 7, 2003. Report will be available on the USDA, NASS website. (www.usda.gov/nass/)

3/ Excludes Alaska and Hawaii.

LAND VALUES

Each year, the Minnesota Department of Revenue compiles every farmland sale in the state into a single data set that includes sale price, parcel size, number of tillable acres, and other pertinent items.

Statewide sales in 2002 totaled 1,788, an increase of 13.2 percent from the 2001 sales. The average acreage per sale in 2002 was 104 acres, compared with 117 acres in 2001. Average unadjusted sale price per acre was \$1,414 in 2002, a decrease of \$91 per acre from the 2001 average.

FARMLAND SALES: Number, Acres, and Price, Minnesota, 1998-2002

Sales Year	Number of Sales	Acres Sold	Price Per Acre	
			Unadjusted Average	Median
	<u>Number</u>	<u>Acres</u>	----- <u>Dollars</u> -----	
1998	2,491	271,848	1,214	1,096
1999	2,220	242,468	1,232	1,146
2000	2,245	252,460	1,346	1,229
2001	1,579	184,323	1,505	1,369
2002	1,788	186,434	1,414	1,499

FARMLAND SALES: Number, Acres, and Price, by District, Minnesota, 2002

Reporting District	Number of Sales	Acres Sold	Price Per Acre	
			Unadjusted Average	Median
	<u>Number</u>	<u>Acres</u>	----- <u>Dollars</u> -----	
Northwest	283	45,950	595	578
North Central	55	6,351	686	817
Northeast	10	683	1,129	805
West Central	254	29,198	1,104	1,056
Central	413	33,862	1,869	1,713
East Central	135	8,605	2,166	2,136
Southwest	197	23,505	1,561	1,621
South Central	268	21,302	2,093	2,050
Southeast	173	16,978	2,106	1,624
Minnesota	1,788	186,434	1,414	1,499

Source: "Minnesota Agricultural Economist".

Steven J. Taff, Department of Applied Economics, University of Minnesota.

Internet Web Site (www.apec.umn.edu/faculty/staff/).

CROPLAND RENTED FOR CASH: Average Cash Rent Per Acres, Minnesota and Selected States, 1999-2002 1/ 2/

State	1999	2000	2001	2002	Change 2001-2002
	----- <u>Dollar Per Acre</u> -----				<u>Percent</u>
MN	75.60	77.90	80.50	80.90	0.5
IA	112.00	115.00	117.00	120.00	2.6
ND	35.50	35.50	36.00	36.50	1.4
SD	38.00	39.80	40.00	42.00	5.0
WI	62.00	65.00	66.00	66.00	0.0
48 States 3/	67.50	70.00	71.00	71.50	0.7

1/ Cash rent is in normal dollars (not adjusted for inflation).

2/ Publication date for 2003 data is scheduled for August 7, 2003. Report would be available on the USDA, NASS website (see page 119).

3/ Excludes Alaska and Hawaii.

**CORN AND SOYBEANS: Production Cash Costs
and Returns, Heartland Region, 2000-2001 1/**

Item	Corn		Soybeans	
	2000	2001	2000	2001
	<u>Dollars Per Planted Acre</u>		<u>Dollars Per Planted Acre</u>	
Gross value of production (excluding direct Government payments)				
Total, gross value of production	259.36	273.17	199.80	191.36
Operating costs				
Seed	30.64	33.00	18.30	21.72
Fertilizer, lime, and gypsum	41.60	49.85	7.23	7.42
Soil conditioners	0.10	0.09	0.14	0.09
Manure	0.36	1.73	0.94	1.18
Chemicals	30.51	26.67	22.58	22.82
Custom operations 2/	10.96	9.77	5.99	6.14
Fuel, lube, and electricity	26.41	16.18	7.78	7.84
Repairs	15.98	12.21	9.50	9.83
Other variable cash expenses 3/	0.00	0.00	0.00	0.00
Interest on operating capital	4.51	2.50	2.08	1.30
Total, operating costs	161.07	152.00	74.54	78.34
Allocated overhead				
Hired labor	2.35	2.10	1.35	1.42
Opportunity cost of unpaid labor	31.80	22.20	18.93	19.41
Capital recovery of machinery and equipment	67.32	51.27	51.02	52.80
Opportunity cost of land (rental rate)	100.73	96.90	90.65	92.38
Taxes and insurance	6.47	5.15	7.04	7.14
General farm overhead	11.11	10.49	14.94	15.46
Total, allocated overhead	219.78	188.11	183.93	188.61
Total costs listed	380.85	340.11	258.47	266.95
Value of production less total costs listed	-121.50	-66.94	-58.67	-75.59
Value of production less operating costs	98.29	121.17	125.26	113.02
Supporting information				
Yield (bu./planted acre)	148	151	45	46
Price (dollars per bushel at harvest)	1.75	1.80	4.44	4.16
Enterprise size (planted acres) 4/	223	270	225	225
Production practices 4/				
Irrigated (percent)	6	5	2	2
Dryland (percent)	94	95	98	98

1/ The Heartland Region includes portions of South Dakota, Nebraska, Iowa, Missouri, Illinois, Indiana, Ohio, and Minnesota's Ag. Statistics Districts 4, 7, 8, and 9. Minnesota is also part of the Northern Crescent and Northern Great Plains Regions. Information is available about the Northern Crescent and Northern Great Plains Regions on the ERS websites listed below.

2/ Cost of custom operations, technical services, and commercial drying.

3/ Cost of purchased irrigation water.

4/ Developed from survey base year 1996, for corn. Developed from base year, 1997, for soybeans.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.
Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)

WHEAT: Production Cash Costs and Returns, Northern Plains Region, 1994-2001 1/ 2/

Item	1994	1995	1996	1997	1998	1999	2000	2001
<u>Dollars per Planted Acre</u>								
Gross value of production (excluding direct Government payments)								
Wheat	92.18	120.59	143.56	93.61	100.10	85.49	83.98	77.94
Wheat straw	0.60	0.51	0.60	0.74	1.74	1.42	1.67	1.85
Total, gross value of production	92.78	121.10	144.16	94.35	101.84	86.91	85.65	79.79
Cash expenses								
Seed	7.83	7.44	8.93	7.64	7.64	6.36	6.19	6.34
Fertilizer, lime, and gypsum	12.25	15.34	15.63	14.85	14.78	13.46	13.91	19.66
Chemicals	7.61	7.98	8.27	8.33	10.61	10.28	10.15	10.14
Custom operations	2.54	2.59	2.72	2.64	4.04	3.82	4.00	3.77
Fuel, lube, and electricity	5.82	5.99	7.12	6.74	4.25	4.16	6.06	6.03
Repairs	12.07	12.51	14.09	12.77	8.10	8.85	9.85	9.66
Hired labor	2.16	2.30	2.39	2.52	1.45	1.48	1.60	1.67
Other variable cash expenses 3/	0.03	0.03	0.03	0.03	0.16	0.16	0.16	0.17
Total, variable cash expenses	50.31	54.18	59.18	55.52	51.03	48.57	51.92	57.44
General farm overhead	4.18	5.45	4.54	5.35	6.32	6.42	6.49	6.76
Taxes and insurance	7.83	8.83	8.67	9.61	3.76	3.81	3.85	3.95
Interest	7.61	10.68	9.39	9.47	1.19	1.11	1.45	0.94
Total, fixed cash expenses	19.62	24.96	22.60	24.43	11.27	11.34	11.79	11.65
Total, cash expenses	69.93	79.14	81.78	79.95	62.04	59.91	63.71	69.09
Gross value of production less cash expenses	22.85	41.96	62.38	14.40	39.80	27.00	21.94	10.70
Harvest-period price (dollars/bu.)	3.31	4.31	4.86	3.81	2.91	2.68	2.50	2.66
Yield (bu./planted acre)	27.85	27.98	29.54	24.57	34.40	31.90	33.60	29.30

1/ Data for 1994-1997 refer to the Northern Plains Region which includes Minnesota, North Dakota, South Dakota, Montana, and Wyoming.

2/ Data for 1998 and later refer to the Northern Great Plains Region which includes North Dakota, South Dakota, and parts of Montana, Wyoming, Nebraska and Minnesota.

3/ Cost of purchased irrigation water and baling.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.
Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)

BARLEY: Production Cash Costs and Returns, Northern Plains Region, 1994-2001 1/

Item	1994	1995	1996	1997	1998	1999	2000	2001
<u>Dollars per Planted Acre</u>								
Gross value of production (excluding direct Government payments)								
Barley	89.47	109.22	139.00	91.83	79.90	73.27	68.82	75.98
Barley straw	1.94	1.87	1.89	2.67	2.07	1.79	2.02	2.07
Total, gross value of production	91.41	111.09	140.89	94.50	81.97	75.06	70.84	78.05
Cash expenses								
Seed	5.22	5.72	7.63	6.77	6.30	5.73	5.84	5.84
Fertilizer, lime, and gypsum	13.47	16.77	17.11	16.68	14.49	13.52	13.80	18.15
Chemicals	7.29	7.69	7.86	7.97	8.11	8.14	7.77	7.93
Custom operations	3.09	3.46	3.41	3.39	3.49	3.68	3.64	3.77
Fuel, lube, and electricity	7.22	7.42	8.85	8.59	7.55	7.72	10.28	8.92
Repairs	12.69	13.04	15.21	13.87	14.08	14.25	14.91	15.02
Hired labor	3.55	3.80	3.98	4.40	4.50	4.65	4.88	5.23
Other variable cash expenses 2/	0.81	0.86	0.98	1.04	1.06	1.32	1.14	1.32
Total, variable cash expenses	53.34	58.76	65.03	62.71	59.58	59.01	62.26	66.18
General farm overhead	6.11	7.27	7.28	7.58	6.07	5.77	5.82	6.01
Taxes and insurance	10.90	11.87	12.86	12.13	11.14	10.39	10.70	10.70
Interest	9.96	13.01	13.70	12.20	11.33	11.40	11.40	12.15
Total, fixed cash expenses	26.97	32.15	33.84	31.91	28.54	27.56	27.92	28.86
Total, cash expenses	80.31	90.91	98.87	94.62	88.12	86.57	90.18	95.04
Gross value of production less cash expenses	11.10	20.18	42.02	-0.12	-6.15	-11.51	-19.34	-16.99
Harvest-period price (dollars/bu.)	1.93	2.47	2.82	2.11	1.69	1.73	1.59	1.83
Yield (bu./planted acre)	46.36	44.22	49.29	43.52	47.28	42.35	43.28	41.52

1/ The Northern Plains Region which includes Minnesota, North Dakota, South Dakota, Montana, and Wyoming.

2/ Cost of purchased irrigation water and baling.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.
Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)

OATS: Production Cash Costs and Returns, North Central Region, 1994-2001 1/

Item	1994	1995	1996	1997	1998	1999	2000	2001
<u>Dollars per Planted Acre</u>								
Gross value of production (excluding direct Government payments)								
Oats	68.92	71.40	119.06	104.46	64.03	68.26	69.90	85.42
Oats straw	44.21	37.98	44.21	49.88	44.21	45.34	46.48	48.18
Total, gross value of production	113.13	109.38	163.27	154.34	108.24	113.60	116.38	133.60
Cash expenses								
Seed	9.29	8.91	9.67	10.10	9.72	9.02	8.30	8.23
Fertilizer, lime, and gypsum	16.71	20.61	20.12	20.09	19.10	17.90	18.24	21.16
Chemicals	1.15	1.19	1.26	1.27	1.27	1.26	1.25	1.27
Custom operations 2/	6.08	5.69	5.75	5.71	5.73	5.75	5.76	5.82
Fuel, lube, and electricity	6.64	4.08	4.19	4.33	3.54	3.72	5.52	5.19
Repairs	9.61	8.03	6.50	7.63	7.10	6.70	6.57	6.69
Hired labor	1.64	1.58	1.73	1.81	1.91	2.00	2.18	2.17
Other variable cash expenses 3/	1.63	1.40	1.63	1.84	1.63	1.67	1.71	1.78
Total, variable cash expenses	52.75	51.49	50.85	52.78	50.00	48.02	49.53	52.31
General farm overhead	4.58	4.83	4.52	5.31	5.01	5.08	5.21	5.38
Taxes and insurance	17.33	19.00	20.15	20.15	19.58	20.15	21.16	21.54
Interest	5.44	6.22	6.14	6.17	6.50	6.13	6.48	6.60
Total, fixed cash expenses	27.35	30.05	30.81	31.63	31.09	31.36	32.85	33.52
Total, cash expenses	80.10	81.54	81.66	84.41	81.09	79.38	82.38	85.83
Gross value of production less cash expenses	33.03	27.84	81.61	69.93	27.15	34.22	34.00	47.77
Harvest-period price (dollars/bu.)	1.23	1.28	2.02	1.62	1.09	1.10	1.02	1.32
Yield (bu./planted acre)	56.03	55.78	58.94	64.48	58.74	62.05	68.53	64.71

1/ The North Central Region includes Minnesota, Iowa, Wisconsin, Illinois, Michigan, and Ohio.

2/ Cost of custom operations and technical services.

3/ Cost of baling.

Note: Survey base changed in 1994.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)**SUGARBEETS: Production Cash Costs and Returns, Red River Valley, 1994-2001 1/**

Item	1994	1995	1996	1997	1998	1999	2000	2001
<u>Dollars per Planted Acre</u>								
Gross value of production								
Beets - gross value of production	852.36	685.85	851.03	697.50	733.42	739.11	723.06	624.60
Cash expenses								
Seed	39.89	41.15	42.91	44.81	46.39	45.55	44.89	45.01
Fertilizer	32.78	39.90	41.68	39.86	35.68	33.83	28.74	37.21
Chemicals	66.79	68.13	71.12	71.13	71.43	70.62	109.03	109.80
Custom operations	24.78	24.12	23.93	23.30	25.78	24.79	23.49	23.02
Fuel and lubrication	18.46	17.85	21.87	20.73	18.43	19.18	24.86	24.55
Repairs	29.87	28.93	29.37	31.53	33.53	34.38	32.52	34.59
Hired labor	66.12	69.33	77.02	83.06	86.06	84.88	51.76	55.21
Purchased irrigation water	0.04	0.04	0.04	0.05	0.05	0.04	0.06	0.06
Freight and dirt hauling charges	9.93	9.55	11.93	11.81	11.25	10.85	13.62	13.91
Miscellaneous 2/	13.85	14.47	16.54	16.94	15.71	15.77	13.30	13.75
Hauling allowance (-)	-9.50	-9.14	-11.39	-11.36	-10.75	-10.36	-10.34	-10.44
Total, variable cash expenses	293.01	304.33	325.02	331.86	333.56	329.53	331.93	346.67
General farm overhead	30.16	30.43	20.75	30.90	28.98	29.48	27.55	28.49
Taxes and insurance	35.88	39.36	33.23	39.24	40.39	40.76	14.57	12.59
Interest	41.90	45.83	32.88	41.99	48.63	49.59	8.38	4.96
Total, fixed cash expenses	107.94	115.62	86.86	112.13	118.00	119.83	50.50	46.04
Total, cash expenses	400.95	419.95	411.88	443.99	451.56	449.36	382.43	392.71
Gross value of production less cash expenses	451.41	265.90	439.15	253.51	281.86	289.75	340.63	231.89
Season-average price (dollars/ton)	41.66	38.38	46.76	38.43	35.21	37.16	35.10	35.09
Yield (net tons/planted acre)	20.46	17.87	18.20	18.15	20.83	19.89	20.60	17.80

1/ The Red River Valley includes Minnesota and eastern North Dakota.

2/ Includes costs deducted by the processor from the net payment and noncash benefits.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)

**HOG PRODUCTION: Farrow-to-Finish, Farrow-to-Feeder,
Feeder Pig-to-Finish, Cash Costs and Returns, Heartland Region, 2001 1/**

Item	All Hog Producers	Farrow to Finish	Farrow to Feeder 2/	Feeder Pig to Finish
<u>Dollars per Cwt Gain 3/</u>				
Gross value of production				
Market hogs	43.75	42.64	2.21	52.73
Feeder pigs	11.27	0.81	121.07	0.22
Cull stock	1.29	2.19	3.33	0.02
Breeding stock	0.50	0.20	0.33	0.02
Inventory change	-0.36	-0.20	-5.50	0.68
Other income 4/	1.89	1.81	1.52	2.05
Total gross value of production	58.34	47.45	122.96	55.72
Operating costs				
Feed				
Grain	7.10	8.93	1.97	5.64
Protein sources	6.45	8.87	1.00	4.08
Complete mixes	7.74	4.66	25.23	9.06
Other feed items 5/	0.23	0.37	0.23	0.08
Total feed costs	21.52	22.83	28.43	18.86
Other				
Feeder pigs	14.30	0.08	0.76	31.97
Veterinary and medicine	1.22	1.63	2.91	0.55
Bedding and litter	0.04	0.04	0.05	0.02
Marketing	0.63	0.35	3.86	0.54
Custom services	0.32	0.28	0.31	0.40
Fuel, lube, and electricity	1.45	1.55	3.79	0.92
Repairs	0.92	1.26	1.16	0.43
Other operating costs 6/	0.03	0.03	0.04	0.03
Interest on operating capital	0.68	0.47	0.70	0.91
Total operating costs	41.11	28.52	42.01	54.63
Allocated overhead				
Hired labor	2.43	2.83	11.80	0.45
Opportunity cost of unpaid labor	5.84	7.51	7.86	3.38
Capital recovery of machinery and equipment	11.11	12.03	27.68	6.95
Opportunity cost of land (rental rate)	0.05	0.06	0.07	0.02
Taxes and insurance	0.50	0.54	0.95	0.38
General farm overhead	1.02	1.11	1.59	0.80
Total, allocated overhead	20.95	24.08	49.95	11.98
Total costs listed	62.06	52.60	91.96	66.61
Value of production less total costs listed	-3.72	-5.15	31.00	-10.89
Value of production less operating costs	17.23	18.93	80.95	1.09
Supporting information				
Production arrangement (percent of production) 7/				
Independent	72	99	22	49
Under contract	28	1	78	51
Size of operation (head sold/removed)				
Market hogs	1,706	1,520	72	2,486
Feeder pigs	924	49	8,886	14

1/ The Heartland Region includes portions of South Dakota, Nebraska, Iowa, Missouri, Illinois, Indiana, Ohio, and Minnesota's Ag. Statistics Districts 4, 7, 8, and 9. Minnesota is also part of the Northern Crescent and Northern Great Plains Regions. Information is available about the Northern Crescent and Northern Great Plains Regions on the ERS website.

2/ Farrow to Feeder data are for the United States (Heartland Region data are not available).

3/ Cwt gain = (cwt sold - cwt purchased) ÷ cwt inventory change.

4/ Value of manure production.

5/ Milk replacer, milk, milk by-products, antibiotics, and other medicated additives.

6/ Costs for odor control and fees, permits, licenses, and other regulatory costs.

7/ Developed from survey base year, 1998.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.
Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)

COW-CALF: Production Cash Costs and Returns, Heartland Region, 2000-2001 1/

Item	2000	2001
	<u>Dollars per Bred Cow</u>	
Gross value of production		
Steer calves	191.23	188.26
Heifer calves	129.55	127.54
Yearling steers	37.75	38.84
Yearling heifers	11.43	11.74
Other cattle	66.87	72.71
Total, gross value of production	441.36	443.39
Operating costs		
Feeder cattle	25.64	26.39
Feed		
Concentrates and other feed	24.76	26.23
Supplemental feed	30.65	35.19
Harvested forages	190.00	206.00
Cropland pasture	13.10	13.42
Private pasture	68.54	73.63
Public land	0.37	0.37
Total feed costs	327.42	354.84
Other		
Veterinary and medicine	41.64	39.24
Bedding and litter	1.22	1.32
Marketing	4.53	4.30
Custom operations	43.42	40.77
Fuel, lube, and electricity	16.19	16.18
Repairs	31.43	29.63
Interest on operating inputs	15.31	8.89
Total, variable operating costs	506.80	521.56
Allocated overhead		
Hired labor	0.54	0.58
Opportunity cost of unpaid labor	200.12	205.55
Capital recovery cost of machinery and equipment	254.91	272.90
Opportunity cost of land	5.42	5.46
Taxes and insurance	43.78	44.13
General farm overhead	80.63	82.71
Total, allocated overhead	585.40	611.33
Total cost listed	1,092.20	1,132.89
Value of production less total costs listed	-650.84	-689.50
Value of production less operating costs	-65.44	-78.17

1/ The Heartland Region includes portions of South Dakota, Nebraska, Iowa, Missouri, Illinois, Indiana, Ohio, and Minnesota's Ag. Statistics Districts 4, 7, 8, and 9. Minnesota is also part of the Northern Crescent and Northern Great Plains Regions. Information is available about the Northern Crescent and Northern Great Plains Regions on the ERS website listed below.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.
Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)



MILK: Production Costs And Returns, per cwt sold, 2000-2001

Item	Heartland 1/		Northern Crescent 2/	
	2000	2001	2000	2001
Gross value of production	<u>Dollars per Cwt.</u>			
Milk	12.36	15.31	12.90	15.78
Cattle	1.42	1.54	1.17	1.24
Other income 3/	0.79	1.05	0.63	0.81
Total, gross value of production	14.57	17.90	14.70	17.83
Operating costs:				
Feed				
Feed grains	1.83	1.99	1.15	1.22
Hay and straw	2.29	2.37	1.07	1.13
Complete feed mixes	0.87	0.94	1.09	1.14
Liquid whey and milk replacer	0.11	0.07	0.10	0.07
Silage	0.86	0.82	1.26	1.25
Grazed pasture and cropland	0.13	0.13	0.07	0.07
Other Feed item 4/	1.55	1.58	1.05	1.07
Total, feed costs	7.64	7.90	5.79	5.95
Other				
Veterinary and medicine	0.75	0.77	0.77	0.79
Bedding and litter	0.23	0.23	0.23	0.24
Marketing	0.22	0.22	0.31	0.31
Custom service	0.53	0.54	0.47	0.48
Fuel, lube, and electricity	0.56	0.52	0.56	0.54
Repairs	0.59	0.59	0.60	0.61
Other Operating costs 5/	0.00	0.00	0.00	0.00
Interest on operating capital	0.30	0.18	0.25	0.15
Total, Operating costs	10.82	10.95	8.98	9.07
Allocated overhead				
Hired labor	0.73	0.79	1.17	1.21
Opportunity cost of unpaid labor	5.64	5.68	5.15	5.15
Capital recovery of machinery and equipment 6/	4.66	4.67	4.11	4.22
Opportunity cost of land (rental rate)	0.09	0.09	0.09	0.08
Taxes and insurance	0.19	0.20	0.22	0.22
General farm overhead	0.56	0.58	0.61	0.63
Total, allocated overhead	11.87	12.01	11.35	11.51
Total cost listed	22.69	22.96	20.33	20.58
Value of production less total costs listed	-8.12	-5.06	-5.63	-2.75
Value of production less operating costs	3.75	6.95	5.72	8.76
Supporting Information				
Milk Cows (head per farm)	57	59	66	68
Output per cow (pounds)	18,567	18,541	19,721	19,806
Milking frequency greater than twice per day (percent of farms)	1.62	1.77	2.84	2.98
Homegrown feed cost (percent of total feed cost)	60	60	50	49
Milk cows injected with BST (head per farm)	10	10	13	14

1/ The Heartland Region includes MN Agricultural Statistics Districts (ASD) 4, 7, 8, and 9, SD ASD 6 and 9, NE ASD 3 and 6, IA, MO ASD 1, 2, 3, 4, 5, 6 and 9, IL, IN, KY ASD 1 and 2, and Ohio ASD 1, 4, 5, 7 and 8. The first data available for the Heartland Region is 2000.

2/ The Northern Crescent Region includes New England, New York ASD 1, 2, 3, 5, 6, 8 and 9, Ohio ASD 2 and 3, MI, WI and MN ASD 2, 3, 5 and 6. The first data available for the Northern Crescent Region is 2000.

3/ Income from renting or leasing dairy stock to other operations; renting space to other dairy operations; co-op patronage dividends associated with the dairy; assessment rebates, refunds, and other dairy related resources; and manure production.

4/ Cotton seed meal, protein supplements, protein by products, vitamin or mineral supplements, nonprotein byproducts, alfalfa cubes or pellets, green chop, corn stalks, and antibiotics and other medicated additives.

5/ Manure handling.

6/ Machine and equipment, and housing, manure handling, and feed storage structures, and dairy breeding herd.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site (www.ers.usda.gov/data/costsandreturns/testpick.htm)

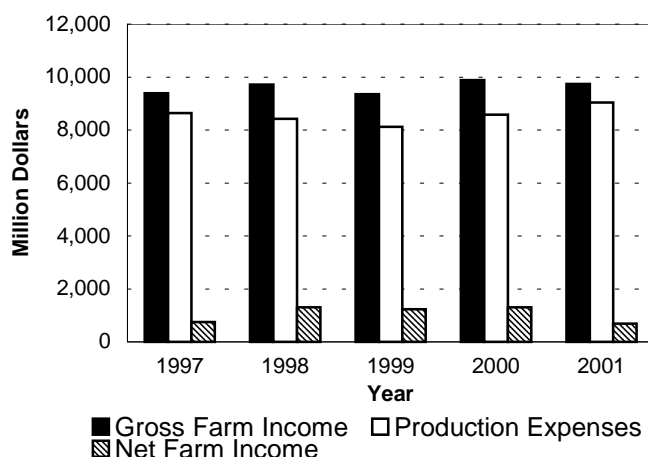
FARM INCOME

Net farm income received by Minnesota farmers in 2001 was down 47% from 2000.

Total net farm income for 2001 was \$695.5 million, compared to \$1.30 billion in 2000. Total farm production expenses in 2001 were \$9.04 billion, compared to \$8.58 billion in 2000.

The "average" Minnesota farm had gross farm income of \$123,281 in 2001. However, expenses totaled \$114,477, leaving the typical farm with \$8,804 of net farm income in 2001, compared with \$16,487 in 2000 and \$15,410 in 1999.

MINNESOTA FARM INCOME AND PRODUCTION EXPENSES



FARM INCOME AND EXPENSES: Minnesota, 1997-2002

Year	Cash Receipts From Farm Marketings	Government Payments	Noncash Income 1/	Farm Related Income 2/	Value of Inventory Adjustment 3/	Total Gross Farm Income	Total Farm Production Expenses	Total Net Farm Income
Million Dollars								
1997	8,069.0	417.0	416.7	457.0	32.8	9,392.5	8,638.7	753.8
1998	7,868.2	794.5	416.2	430.0	207.2	9,716.1	8,416.5	1,299.6
1999	6,999.0	1,409.9	427.3	414.4	108.4	9,359.0	8,126.2	1,232.8
2000	7,463.1	1,502.2	432.1	443.9	38.3	9,879.6	8,576.5	1,302.5
2001 4/	8,101.9	1,242.1	444.2	656.5	(705.5)	9,739.2	9,043.7	695.5
2002 5/	7,398.5							

1/ Includes value of home consumption and housing.

2/ Includes income from custom work, machine hire, forest products, and other farm income.

3/ Estimated physical change in crops and livestock owned by farmers, valued at average prices prevailing during the year.

4/ Preliminary data.

5/ Data for 2002 not available at press time. When data are released, it will be put on the MN Agricultural Statistics Service home page at www.nass.usda.gov/mn/

Note: Figures may not add due to rounding.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

AVERAGE PER FARM INCOME: Minnesota, 1997-2002 1/

Year	Number of Farms	Gross Farm Income	Farm Production Expenses	Net Farm Income
1,000 ----- Dollars -----				
1997	81.0	115,957	106,651	9,306
1998	80.0	121,451	105,206	16,245
1999	80.0	116,988	101,578	15,410
2000	79.0	125,058	108,563	16,495
2001	79.0	123,281	114,477	8,804
2002 2/	79.0			

1/ Farms having annual sales of ag products of \$1,000 or more.

2/ Data for 2002 not available at press time. When data are released, it will be put on the MN Agricultural Statistics Service home page at www.nass.usda.gov/mn/

Note: Figures may not add due to rounding.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

CASH RECEIPTS FROM FARM MARKETINGS: Minnesota, 1999-2001 1/

Commodity	1999		2000		2001	
	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total
	<u>1,000</u>	<u>Percent</u>	<u>1,000</u>	<u>Percent</u>	<u>1,000</u>	<u>Percent</u>
CROPS 2/						
Feed Crops						
Corn	1,165,041	16.6	1,199,614	16.1	1,446,608	17.9
Oats	6,493	0.1	7,077	0.1	6,055	*
Barley	17,313	0.2	11,723	0.2	11,176	0.1
Hay	52,687	0.8	60,737	0.8	74,790	0.9
Food Grains						
Wheat	208,302	3.0	247,910	3.3	260,592	3.2
Rye	1,923	*	1,280	*	739	*
Oil Crops						
Soybeans	1,176,954	16.8	1,298,269	17.4	1,294,095	16.0
Sunflowers	13,285	0.2	12,791	0.2	9,263	0.1
Vegetable Crops						
Potatoes	93,123	1.3	71,854	1.0	100,679	1.2
Sweet Corn (processed)	55,483	0.8	50,897	0.7	54,714	0.7
Green Peas (processed)	42,258	0.6	45,204	0.6	32,091	0.4
Other Crops						
Sugarbeets	346,705	5.0	311,557	4.2	262,725	3.2
Dry Beans	46,199	0.7	32,091	0.4	35,065	0.4
Apples	7,574	0.1	7,557	0.1	7,392	*
Floriculture	70,632	1.0	77,602	1.0	79,625	1.0
Other Crops, Fruits, & Vegetables 3/	145,329	2.1	143,809	1.9	137,831	1.7
Total Crops	3,449,301	49.3	3,579,972	48.0	3,813,440	47.1
LIVESTOCK AND PRODUCTS						
Meat Animals						
Cattle & Calves	749,479	10.7	896,602	12.0	890,842	11.0
Hogs	823,895	11.8	1,207,465	16.2	1,416,925	17.5
Sheep & Lambs	13,571	0.2	13,618	0.2	11,503	0.1
Dairy Products	1,312,220	18.7	1,126,560	15.1	1,297,343	16.0
Poultry & Eggs						
Turkeys	373,013	5.3	360,876	4.8	385,000	4.8
Broilers	77,976	1.1	72,930	1.0	85,605	1.1
Chicken Eggs	114,537	1.6	116,666	1.6	112,810	1.4
Other Livestock Products						
Honey	7,253	0.1	7,695	0.1	6,889	0.1
Miscellaneous Livestock & Products 4/	77,774	1.1	80,703	1.1	81,518	1.0
Total Livestock	3,549,718	50.7	3,883,115	52.0	4,288,435	52.9
TOTAL ALL CROPS AND LIVESTOCK	6,999,019	100.0	7,463,087	100.0	8,101,875	100.0

1/ The years 1999, 2000, and 2001 revised on July 30, 2002.

2/ Includes Commodity Credit loans (calculated by crop open market sales plus net CCC loans).

3/ Includes flaxseed, other oil crops, Kentucky bluegrass, red clover, timothy, and other seeds; asparagus, green lima beans, snap beans, cabbage, onions, carrots, cucumbers, miscellaneous vegetables, mushrooms, other fruits, and other field crops.

4/ Wool, mink, goats, ducks, geese, beeswax, turkey eggs, farm chickens, and other livestock and poultry.

* Less than 0.1%.

Note: Percents may not add to totals because of rounding.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site (www.ers.usda.gov/data/farmincome/finfidmu.htm)

FARM BALANCE SHEET: Minnesota, 1997-2001

Item	1997	1998	1999	2000	2001
	<u>Million Dollars</u>				
Total Farm Assets 1/	41,563.2	43,023.3	44,892.6	47,339.3	48,715.0
Real Estate	28,836.9	30,471.3	31,861.5	33,852.8	35,966.9
Livestock and Poultry 2/	2,104.8	2,009.7	2,438.3	2,484.7	2,438.3
Machinery and Motor Vehicles 3/	4,853.1	4,851.9	4,862.4	4,863.6	4,926.7
Crops 4/	2,604.4	2,093.2	2,094.1	2,388.0	1,701.6
Purchased Inputs	376.0	386.4	308.9	375.6	323.2
Financial	2,788.0	3,210.9	3,327.5	3,374.6	3,358.3
Total Farm Debt 1/ 5/	8,664.5	9,238.7	9,066.1	9,296.7	9,702.8
Real Estate	4,266.6	4,619.7	4,644.6	4,725.0	4,989.0
By Lender					
Farm Credit System	1,373.8	1,635.7	1,522.7	1,535.1	1,700.4
Farm Service Agency 6/	173.2	164.1	151.2	144.7	142.5
Commercial Banks	1,260.1	1,356.3	1,487.7	1,598.0	1,671.0
Life Insurance Companies	255.0	271.0	290.4	272.1	276.1
Individuals and others	1,204.5	1,192.6	1,192.6	1,175.2	1,199.1
Nonreal Estate 1/	4,397.9	4,619.0	4,421.5	4,571.6	4,713.8
By Lender					
Farm Credit System	1,050.2	1,178.3	1,010.4	971.3	1,110.8
Farm Service Agency 6/	190.8	186.3	174.8	175.3	172.0
Commercial Banks	2,343.5	2,407.0	2,359.3	2,504.2	2,494.7
Individuals and others	813.5	847.4	877.0	920.9	936.3
Total Farm Equity 1/	32,898.7	33,784.6	35,826.5	38,042.7	39,012.1
	<u>Percent</u>				
Debt/Equity Ratio	26.3	27.4	25.3	24.4	24.9
Debt/Assets Ratio	20.9	21.5	20.2	19.6	19.9

1/ May not add to total due to rounding.

2/ Excludes horses, mules, and broilers.

3/ Includes only farm share value for trucks and autos.

4/ All non-CCC crops held on farms plus the value above loan rate for crops held under CCC.

5/ Excludes debt for nonfarm purposes.

6/ Farmer Home Administration prior to 1994.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.
Internet Web Site (www.ers.usda.gov/data/farmbalancesheet/fbsdmu.htm)



2002 Climate Summary

January and February precipitation was generally below normal across much of Minnesota. January was dry and mild statewide. In February, exceptions to the dryness were found in some southeastern and central Minnesota counties. Late February snow depths were less than eight inches nearly everywhere in Minnesota. Large sections of northwestern and southern Minnesota reported less than two inches of snow cover.

March precipitation was generally near normal across much of Minnesota. After a three-month period lacking in significant snow events, March compensated for the shortfall by bringing three substantial snowstorms to Minnesota. In sharp contrast with a winter-long trend of unusually warm weather, March 2002 temperatures finished significantly below normal. Temperatures across the state were four to nine degrees lower than historical averages. In a unique juxtaposition, the March mean temperature was colder than any of the preceding winter months in many communities.

April precipitation was somewhat below normal in northern and western Minnesota and a little above normal in central, east central, and southeastern counties. May precipitation totals were generally below normal across Minnesota. In most locations, May precipitation fell short of the historical average by more than one half inch. May precipitation deficits were greater than one and a half inches in many northeastern, south central, and southeastern Minnesota communities.

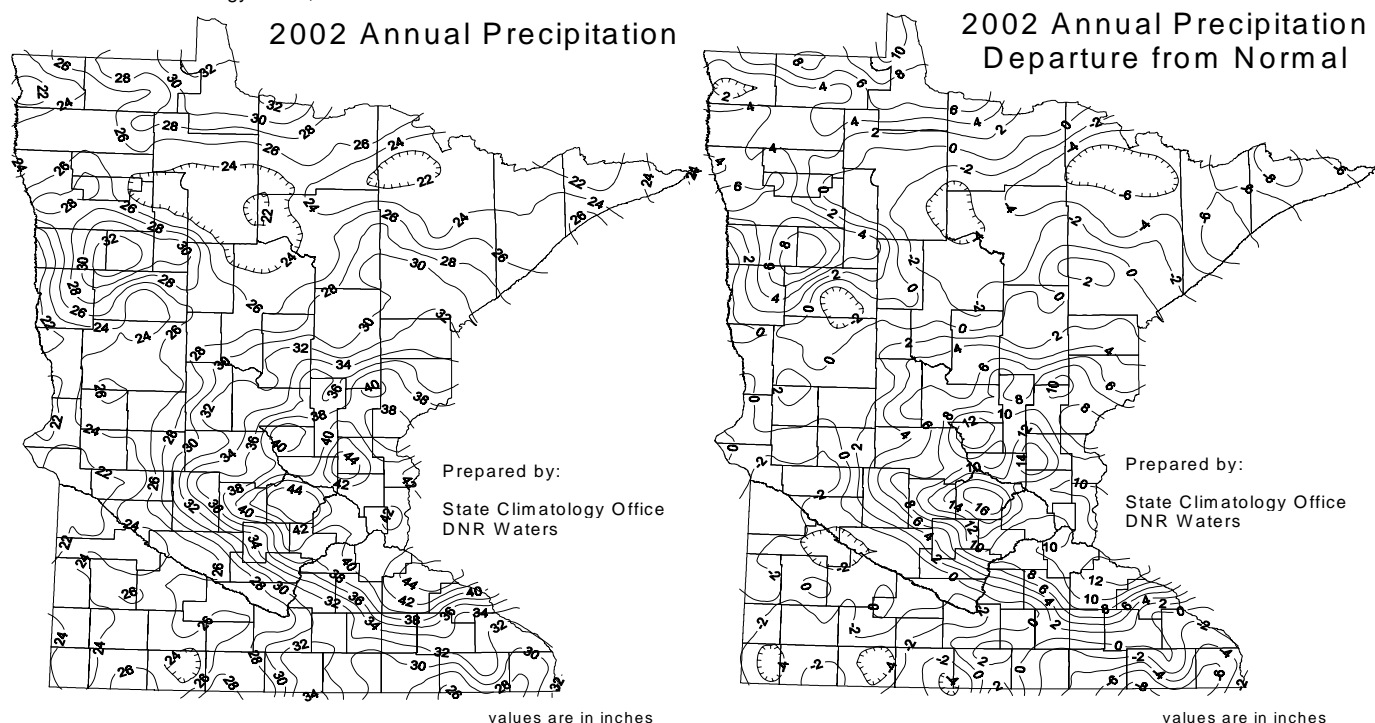
June 2002 was one of the wettest months in Minnesota's post-settlement history. June 2002 precipitation totals exceeded 10 inches in numerous communities of northwestern, north central, central, and southeastern Minnesota. Monthly totals surpassing 12 inches were reported in Norman, Mahanomen, Roseau, Lake of the Woods, Koochiching, and Goodhue counties. The excessive rainfall led to devastating flooding in northwestern Minnesota communities such as Roseau, Ada, and Mahanomen.

July and August precipitation totals were also above average across much of Minnesota. With some exceptions, July 2002 was a wet month across much of the northern three quarters of Minnesota. Rainfall totals exceeded historical July normals by two or more inches in many locations. Precipitation totals surpassed the norm by four or more inches in sections of west central, central, and east central Minnesota. August 2002 monthly rainfall totals across much of Minnesota were well above historical norms. August rainfall totals of more than eight inches were reported at a number of locations scattered around the state. Rainfall in these areas was four or more inches above normal.

During the summer of 2002, Minnesota was an oasis of wetness, wedged between drought-ravaged states to the west and east. The June through August period was Minnesota's third wettest on record. The state-averaged summer (June-August) rainfall total for Minnesota was 16.35 inches. Growing season precipitation totals through the late summer were very high relative to historical values across northwest, central, and east central Minnesota. In these areas, precipitation totals exceeded historical averages by more than 50 percent for the season. By contrast, some sections of northeastern Minnesota reported rainfall deficits for the season.

The autumn of 2002 began with the continuance of the warmth of the summer in September, with precipitation slightly below normal statewide. October turned much cooler with some significant precipitation events during the first half of the month. The second half of October was dry, beginning a trend of dryness that lasted the rest of the year. In many communities, November 2002 was among the driest Novembers on record. December was dry and by the end of the year the southern two thirds of the state had virtually no snow cover.

Source: State Climatology Office, DNR – Division of Waters



MEDIAN FROST DATES: Minnesota, Based on Averages from 1948-92

District and County		Average Date of Last Temperature Occurrence			Average Date of First Temperature Occurrence			Number of Days Between Average Last Spring and First Fall Occurrence of:		
		24°F	28°F	32°F	32°F	28°F	24°F	32°F	28°F	24°F
Northwest										
Norman	Ada	Apr 24	May 06	May 14	Sep 24	Oct 02	Oct 13	133	153	176
Marshall	Argyle	Apr 26	May 09	May 18	Sep 22	Sep 28	Oct 10	126	143	168
Polk	Crookston	Apr 25	May 08	May 16	Sep 23	Sep 29	Oct 13	129	145	170
Becker	Detroit Lakes	May 02	May 10	May 21	Sep 17	Sep 24	Oct 05	116	139	157
Polk	Fosston	Apr 26	May 07	May 17	Sep 21	Sep 28	Oct 16	127	146	173
Kittson	Hallock	Apr 27	May 09	May 19	Sep 23	Oct 02	Oct 10	126	144	165
Clay	Moorhead	Apr 21	May 06	May 13	Sep 24	Oct 04	Oct 15	135	152	178
Red Lake	Red Lake Falls	Apr 20	May 08	May 17	Sep 22	Sep 28	Oct 10	127	141	176
Roseau	Roseau	May 04	May 14	May 25	Sep 16	Sep 25	Oct 07	112	137	159
Roseau	Warroad	Apr 30	May 10	May 21	Sep 23	Sep 28	Oct 12	124	141	165
North Central										
Lake of the Woods	Baudette	Apr 28	May 09	May 22	Sep 22	Sep 28	Oct 13	122	146	164
Beltrami	Bemidji	May 04	May 09	May 22	Sep 22	Sep 27	Oct 15	124	136	164
Koochiching	Big Falls	May 04	May 15	Jun 01	Sep 15	Sep 24	Oct 05	108	135	159
Itasca	Grand Rapids	Apr 27	May 09	May 23	Sep 20	Sep 27	Oct 09	116	141	165
Koochiching	Int'l Falls	Apr 29	May 12	May 24	Sep 17	Sep 25	Oct 08	114	138	163
Hubbard	Park Rapids	May 01	May 08	May 19	Sep 20	Sep 27	Oct 07	124	143	162
Northeast										
St. Louis	Babbitt	Apr 28	May 09	May 21	Sep 23	Oct 05	Oct 22	125	153	174
St. Louis	Duluth (Airport)	Apr 24	May 09	May 20	Sep 22	Oct 05	Oct 17	124	154	175
Cook	Grand Marais	Apr 17	May 01	May 15	Sep 30	Oct 19	Oct 30	138	171	194
St. Louis	Hibbing	Apr 28	May 12	May 29	Sep 13	Sep 26	Oct 06	107	137	163
West Central										
Douglas	Alexandria	Apr 13	Apr 24	May 08	Oct 01	Oct 12	Oct 25	146	169	194
Swift	Benson	Apr 13	Apr 29	May 07	Sep 30	Oct 10	Oct 18	146	166	189
Wilkin	Campbell	Apr 20	Apr 29	May 10	Sep 24	Oct 02	Oct 14	136	156	179
Yellow Medicine	Canby	Apr 14	Apr 28	May 08	Oct 01	Oct 10	Oct 21	147	163	189
Otter Tail	Fergus Falls	Apr 16	Apr 30	May 09	Sep 27	Oct 09	Oct 21	143	162	188
Lac Qui Parle	Madison	Apr 14	Apr 29	May 07	Sep 28	Oct 09	Oct 20	144	166	192
Lac Qui Parle	Montevideo	Apr 13	Apr 28	May 07	Sep 30	Oct 10	Oct 21	146	169	192
Stevens	Morris	Apr 14	Apr 29	May 08	Sep 27	Oct 06	Oct 17	143	161	185
Traverse	Wheaton	Apr 15	Apr 28	May 10	Sep 28	Oct 10	Oct 23	143	162	189
Central										
Sibley	Gaylord	Apr 09	Apr 17	Apr 30	Oct 05	Oct 14	Oct 24	159	180	193
Scott	Jordan	Apr 13	Apr 28	May 10	Sep 27	Oct 07	Oct 20	143	164	190
Morrison	Little Falls	Apr 19	May 02	May 12	Sep 24	Oct 03	Oct 17	136	154	181
Stearns	Melrose	Apr 12	Apr 28	May 11	Sep 24	Oct 05	Oct 16	138	160	186
Stearns	St. Cloud	Apr 19	May 01	May 12	Sep 24	Oct 05	Oct 17	138	157	180
Wadena	Wadena	Apr 22	May 16	May 12	Sep 24	Oct 03	Oct 18	137	156	180
Kandiyohi	Willmar	Apr 12	May 05	May 02	Oct 03	Oct 14	Oct 24	154	172	193
East Central										
Aitkin	Aitkin	Apr 23	May 06	May 19	Sep 23	Sep 28	Oct 18	126	149	176
Crow Wing	Brainerd	Apr 22	May 04	May 12	Sep 20	Oct 01	Oct 16	132	151	175
Pine	Hinckley	Apr 22	May 06	May 20	Sep 22	Sep 28	Oct 10	120	147	172
Hennepin	Maple Plain	Apr 13	Apr 25	May 06	Oct 01	Oct 13	Oct 25	153	169	195
Mille Lacs	Milaca	Apr 18	May 01	May 12	Sep 25	Oct 03	Oct 18	137	153	184
Carlton	Moose Lake	May 02	May 16	May 31	Sep 16	Sep 26	Oct 07	109	132	162
Kanabec	Mora	Apr 21	May 05	May 17	Sep 20	Oct 01	Oct 14	125	151	169
Washington	Stillwater	Apr 10	Apr 16	May 02	Oct 07	Oct 16	Nov 02	160	184	207
Southwest										
Redwood	Lamberton	Apr 09	Apr 28	May 06	Sep 29	Oct 07	Oct 15	146	163	188
Rock	Luverne	Apr 16	Apr 29	May 07	Sep 27	Oct 05	Oct 16	142	160	177
Lyon	Marshall	Apr 10	Apr 22	May 05	Oct 04	Oct 15	Oct 24	155	176	196
Pipestone	Pipestone	Apr 23	May 05	May 12	Sep 23	Oct 03	Oct 10	135	151	171
Cottonwood	Windom	Apr 14	Apr 15	May 07	Sep 30	Oct 07	Oct 19	146	167	189
South Central										
Freeborn	Albert Lea	Apr 09	Apr 20	May 02	Oct 05	Oct 18	Oct 31	156	181	201
Martin	Fairmont	Apr 06	Apr 14	May 01	Oct 09	Oct 20	Oct 31	161	189	208
Rice	Faribault	Apr 14	Apr 27	May 10	Sep 29	Oct 11	Oct 24	146	167	193
Brown	New Ulm	Apr 09	Apr 23	May 03	Sep 28	Oct 10	Oct 23	148	170	193
Waseca	Waseca	Apr 12	Apr 23	May 06	Oct 01	Oct 06	Oct 24	149	167	192
Faribault	Winnebago	Apr 09	Apr 19	May 03	Oct 06	Oct 17	Oct 26	158	180	203
Southeast										
Mower	Austin	Apr 12	Apr 29	May 07	Sep 27	Oct 06	Oct 23	144	166	191
Houston	Caledonia	Apr 14	Apr 24	May 06	Sep 29	Oct 11	Oct 26	152	174	192
Dakota	Farmington	Apr 11	Apr 21	May 03	Oct 03	Oct 12	Oct 29	155	178	201
Fillmore	Preston	Apr 21	May 07	May 18	Sep 21	Sep 29	Oct 13	125	148	178
Olmsted	Rochester	Apr 11	Apr 21	May 08	Sep 30	Oct 13	Oct 27	147	174	197
Winona	Winona	Apr 07	Apr 17	Apr 17	Oct 06	Oct 19	Oct 31	163	184	205
Goodhue	Zumbrota	Apr 17	Apr 30	Apr 30	Sep 25	Oct 03	Oct 18	139	157	187

Source: State Climatology Office, DNR - Division of Waters

MONTHLY PRECIPITATION: by Selected Stations and Districts, Minnesota, 2002

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 1/
<u>Precipitation (Inches)</u>												
Northwest												
Argyle	.12	T	.56	.89	2.58	6.35	3.16	9.45	3.06	.90	.17	
Crookston	M.03	M.07	M.49	1.26	1.90	6.55	3.69	9.41	1.48	1.25	.16	
Moorhead	M	M	M	M	M	M	M	2.29	M	1.55	M	
District Average	.14	.10	.72	1.15	2.31	8.41	4.44	5.24	1.77	1.29	.23	
District Normal	.71	.48	.96	1.63	2.52	3.71	3.17	2.96	2.55	1.72	.82	
North Central												
Grand Rapids	.36	.28	1.51	1.42	1.66	5.97	4.18	5.98	2.01	2.45	.44	
Int'l Falls	.07	.04	.29	1.48	2.08	8.29	3.79	4.35	1.19	1.07	.22	
Walker	M1.28	.22	M.94	1.56	M	6.05	3.14	5.04	M	2.35	.08	
District Average	.26	.15	.86	1.52	2.21	7.29	4.14	4.77	1.71	1.75	.33	
District Normal	.78	.52	1.15	1.92	2.83	4.00	3.74	3.51	3.02	2.28	1.12	
Northeast												
Duluth	.40	.64	1.87	2.72	2.04	5.75	5.40	4.22	3.93	3.05	.34	
Grand Marais	M.13	.05	.89	.63	1.04	2.93	2.20	3.27	3.42	2.23	.33	
Hibbing	.36	.13	.31	.96	1.33	6.01	4.78	6.17	2.03	2.36	.23	
District Average	.31	.47	1.41	1.13	1.65	4.74	3.82	4.46	2.78	2.69	.48	
District Normal	.98	.66	1.36	2.03	2.93	4.03	3.70	3.81	3.58	2.54	1.56	
West Central												
Canby	.07	.69	2.57	2.44	2.28	2.81	2.20	5.83	M	3.14	.09	
Fergus Falls	M.05	.62	M	M	M	2.15	9.77	4.57	1.23	M2.18	M.00	
Montevideo	M.00	M.09	M.06	M2.16	M2.78	2.89	4.78	9.08	1.30	M3.16	M.07	
Morris	.22	.99	1.31	1.95	2.06	4.49	6.04	3.83	1.39	2.58	.10	
District Average	.18	.64	1.13	2.22	2.53	2.92	5.65	4.33	1.36	2.68	.20	
District Normal	.73	.67	1.39	2.22	2.84	3.81	3.31	3.01	2.46	1.99	1.05	
Central												
Hutchinson	M.25	1.10	.86	2.45	2.55	10.51	4.33	8.44	.88	3.67	.05	
Olivia	.05	.52	1.48	2.27	2.41	5.10	3.69	5.42	M.69	3.87	T	
St. Cloud	.28	.95	1.06	3.68	2.06	4.92	5.10	5.59	6.67	3.48	.15	
Willmar	.02	.89	2.25	2.83	3.17	6.37	4.55	8.43	1.58	3.21	.03	
District Average	.12	1.16	1.89	3.14	3.00	6.96	6.66	6.32	2.53	3.66	.13	
District Normal	.79	.70	1.63	2.46	3.22	4.35	3.66	3.66	3.01	2.27	1.36	
East Central												
Aitkin	.21	.94	1.72	3.42	2.20	3.13	8.87	3.20	4.06	2.79	.10	
Cambridge	.10	1.54	M	M	M	M	M	M	M	M	M	
MSP-Airport	.46	.26	1.38	3.15	2.83	8.30	5.19	8.30	3.90	4.18	.08	
District Average	.29	.96	2.05	3.40	2.90	6.06	7.20	5.80	4.30	3.65	.09	
District Normal	.88	.69	1.62	2.33	3.31	4.31	3.88	3.83	3.35	2.46	1.52	
Southwest												
Lamberton	M.08	M.41	M1.21	1.86	2.20	3.82	3.28	5.35	.91	3.47	.10	
Marshall	.17	.58	3.75	3.61	2.60	3.82	2.61	5.63	1.02	3.47	.20	
Pipestone	M.08	.19	1.75	2.60	1.33	4.85	1.93	7.66	1.97	3.94	.08	
Redwood Falls	T	.19	1.13	2.35	2.92	4.55	3.21	5.80	.79	3.39	.09	
Windom	.24	.65	1.39	2.72	3.17	3.61	1.84	7.66	1.41	3.21	M.13	
District Average	.13	.42	1.64	2.55	2.44	3.55	2.35	7.33	1.19	3.40	.12	
District Normal	.58	.68	1.70	2.56	3.18	3.78	3.73	2.95	3.08	2.04	1.28	
South Central												
Fairmont	.17	.66	M1.86	3.38	1.32	3.53	2.31	5.11	3.05	M2.67	.20	
Faribault	.64	.55	2.29	3.30	1.85	10.27	4.24	5.73	2.92	4.01	.13	
Mankato	.15	.56	1.67	3.04	2.05	5.09	2.00	4.92	2.23	3.14	.23	
Waseca	.49	.52	1.72	2.84	1.71	7.15	2.68	6.08	2.56	4.44	.26	
District Average	.36	.64	1.84	3.04	2.08	6.32	3.58	5.55	2.52	3.88	.18	
District Normal	.77	.78	1.89	2.80	3.48	4.01	4.08	3.79	3.24	2.26	1.50	
Southeast												
Austin	.93	.89	1.31	3.85	1.90	3.94	5.38	4.90	1.93	M3.65	.18	
Caledonia	.62	1.67	M1.12	3.77	1.79	6.89	4.16	2.57	3.09	2.81	.53	
Rochester	.65	1.68	1.24	3.40	1.47	8.20	5.00	4.64	2.02	3.50	.12	
Winona	.53	1.98	2.28	4.63	1.33	7.87	2.98	4.86	3.23	3.29	.24	
District Average	.49	1.51	1.78	3.79	1.89	8.36	3.94	5.79	3.60	3.80	.20	
District Normal	.96	.86	1.96	2.91	3.72	4.03	4.19	3.98	3.77	2.49	1.75	

M = Missing, insufficient, or partial data

T = Trace, too small to measure

1/ Data not available at time of publication.

Source: National Oceanic and Atmospheric Administration, U.S. Department of Commerce